

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Lei Shao

Title: MULTIPLE ANTENNA SYSTEMS AND METHODS USING HIGH-THROUGHPUT  
SPACE-FREQUENCY BLOCK CODES

Docket No.: 884.B52US1

Serial No.: 10/814,113

Filed: March 30, 2004

Due Date: N/A

Examiner: Khai Tran

Group Art Unit: 2611

**MS Amendment**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

We are transmitting herewith the following attached items (as indicated with an "X"):

- Supplemental Information Disclosure Statement (2 pgs.), Form 1449 (1 pg.), and copies of 2 cited documents.
- Authorization to charge Deposit Account 19-0743 in the amount of \$180.00 to cover the fee for consideration of Information Disclosure Statement under 97(c).

If not provided for in a separate paper filed herewith, Please consider this a PETITION FOR EXTENSION OF TIME for sufficient number of months to enter these papers and please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

SCHWEGMAN, LUNDBERG & WOESSNER, P.A. By: /  
Customer Number 21186

Atty: Gregory J. Gorrie  
Reg. No. 36,530

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.

(GENERAL)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Lei Shao Examiner: Khai Tran  
Serial No.: 10/814,113 Group Art Unit: 2611  
Filed: March 30, 2004 Docket: 884.B52US1  
Title: MULTIPLE ANTENNA SYSTEMS AND METHODS USING HIGH-  
THROUGHPUT SPACE-FREQUENCY BLOCK CODES

## **SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

MS Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with 37 C.F.R. §§ 1.97 *et. seq.*, the enclosed materials are brought to the attention of the Examiner for consideration in connection with the above-identified patent application. Applicant respectfully requests that this Supplemental Information Disclosure Statement be entered and the documents listed on the attached Form 1449 be considered by the Examiner and made of record. Pursuant to the provisions of MPEP 609, Applicant requests that a copy of the 1449 form, initialed as being considered by the Examiner, be returned to the Applicant with the next official communication.

Pursuant to 37 C.F.R. §1.97(c)(2), Applicants hereby authorize the Commissioner to charge the fee of \$180.00 as set forth in 37 C.F.R. §1.17(p), to Deposit Account No. 19-0743. Please charge any additional fees or credit any overpayment to Deposit Account No. 19-0743.

The Examiner is invited to contact the Applicant's Representative at the below-listed telephone number if there are any questions regarding this communication.

Respectfully submitted,

Lei Shao,

By his Representatives,

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By Gregory J. Gorrie  
Gregory J. Gorrie  
Reg. No. 36,530

Substitute for form 1449A/PTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(Use as many sheets as necessary)</i>		Complete if Known	
		Application Number	10/814,113
		Filing Date	March 30, 2004
		First Named Inventor	Shao, Lei
		Group Art Unit	2611
		Examiner Name	Tran, Khai
Sheet 1 of 1		Attorney Docket No: 884.B52US1	

US PATENT DOCUMENTS				
Examiner Initials*	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Filing Date If Appropriate

FOREIGN PATENT DOCUMENTS				
Examiner Initials*	Foreign Document No	Publication Date	Name of Patentee or Applicant of cited Document	T <sup>2</sup>

OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T <sup>2</sup>
		ALAMOUTI, SIAVASH M., "A Simple Transmit Diversity Technique for Wireless Communications", IEEE Journal on Select Areas in Communications, 16(8), (Oct., 1998), 1451-1458		
		TAROKH, VAHID , et al., "Space-Time Codes for High Data Rate Wireless Communication: Performance Criterion and Code Construction", IEEE Transactions on Information Theory, 44(2), (Mar., 1998), 744-765		

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EXAMINER

DATE CONSIDERED